

AMENDMENTS TO THE CLAIMS

The following listing of claims is provided in accordance with 37 C.F.R. § 1.121.

1. (Currently Amended) A method of casing a well bore comprising:
placing a casing into the well bore, the casing comprising
a sleeve,
a stress-absorbing material that is coated on the sleeve to form a casing coating, wherein the casing coating substantially covers a circumferential area of the sleeve along a length of the sleeve, and
a collar connected to an end of the sleeve, the collar comprising the stress-absorbing material.
- 2-4. (Canceled)
5. (Currently Amended) The method of claim 1 wherein the casing coating is directly coated on an interior surface of the sleeve.
6. (Currently Amended) The method of claim 1 wherein the casing coating is directly coated on an exterior surface of the sleeve.
7. (Previously Presented) The method of claim 1 wherein the casing coating has a thickness of less than about three inches.
8. (Previously Presented) The method of claim 1 wherein the casing coating is applied to the sleeve by extrusion, showering, dipping, brush coating, powder coating, or hot melting.
9. (Original) The method of claim 1 wherein the stress-absorbing material comprises a fiber, a resin, or an elastomer.
10. (Canceled)

11. (Previously Presented) The method of claim 1 wherein the casing collar further comprises a hollow cylindrically shaped housing.

12. (Withdrawn – Previously Presented) The method of claim 11 wherein the stress-absorbing material is embedded within the cylindrically shaped housing.

13. (Previously Presented) The method of claim 11 wherein the stress-absorbing material forms a collar coating coated on a surface of the hollow cylindrically shaped housing.

14. (Currently Amended) A method of casing a well bore comprising:
placing a casing into the well bore, the casing comprising
a sleeve, and
a casing coating comprising a stress-absorbing material, wherein the stress-absorbing material comprises fibers and substantially covers a circumferential area of the sleeve along a length of the sleeve.

15. (Currently Amended) The method of claim 14 wherein the casing coating is directly coated on an exterior surface of the sleeve.

16. (Currently Amended) The method of claim 14 wherein the casing coating is directly coated on an interior surface of the sleeve.

17. (Currently Amended) The method of claim 14 wherein the casing coating has a substantially consistent thickness of less than about three inches completely covering the circumferential area of the sleeve along the length of the sleeve.

18. (Original) The method of claim 14 wherein the casing coating is applied to the sleeve by extrusion, showering, dipping, brush coating, powder coating, or hot melting.

19. (Previously Presented) The method of claim 14 wherein the fibers comprise polypropylene fibers, nylon fibers, or carbons fibers.

20. (Original) The method of claim 14 wherein a casing collar is connected to an end of the casing.

21. (Previously Presented) The method of claim 20 wherein the casing collar comprises a hollow cylindrically shaped housing, and a collar coating comprising a stress-absorbing material coated on the hollow cylindrically shaped housing.

22. (Currently Amended) A method of reducing the transmission of stress from a casing to a cement sheath comprising:

placing the casing into a well bore that penetrates a subterranean formation, the casing comprising a sleeve, a stress-absorbing material that is coated on the sleeve to form a casing coating, and a collar connected to an end of the sleeve, the collar comprising the stress-absorbing material, wherein the casing coating substantially covers a circumferential area of the sleeve along a length of the sleeve;

placing a cement composition into an annulus between the casing and the subterranean formation; and

allowing the cement composition to set within the annulus so as to bond the casing to a portion of the subterranean formation.

23-25. (Canceled)

26. (Currently Amended) The method of claim 22 wherein the casing coating is directly coated on an interior surface of the sleeve.

27. (Currently Amended) The method of claim 22 wherein the casing coating is directly coated on an exterior surface of the sleeve.

28. (Currently Amended) The method of claim 22 wherein the casing coating has a substantially consistent thickness of less than about three inches and the casing coating completely covers the circumferential area of the sleeve along the length of the sleeve.

29. (Previously Presented) The method of claim 22 wherein the casing coating is applied to the sleeve by extrusion, showering, dipping, brush coating, powder coating, or hot melting.

30. (Original) The method of claim 22 wherein the stress-absorbing material comprises a fiber, a resin, or an elastomer.

31. (Canceled)

32. (Previously Presented) The method of claim 22 wherein the casing collar further comprises a hollow cylindrically shaped housing.

33. (Withdrawn) The method of claim 32 wherein the stress-absorbing material is embedded within the cylindrically shaped housing.

34. (Previously Presented) The method of claim 32 wherein the stress-absorbing material forms a collar coating coated on a surface of the hollow cylindrically shaped housing.

35. (Currently Amended) A method of reducing the transmission of stress from a casing to a cement sheath comprising:

placing the casing into a well bore that penetrates a subterranean formation, the casing comprising

a sleeve, and

a casing coating comprising a stress-absorbing material coated on the sleeve, wherein the stress-absorbing material comprises fibers and substantially covers a circumferential area of the sleeve along a length of the sleeve; and

placing a cement composition into an annulus between the casing and the subterranean formation; and

allowing the cement composition to set within the annulus so as to bond the casing to a portion of the subterranean formation.

36. (Currently Amended) The method of claim 35 wherein the casing coating is directly coated on an exterior surface of the sleeve.

37. (Currently Amended) The method of claim 35 wherein the casing coating is directly coated on an interior surface of the sleeve.

38. (Currently Amended) The method of claim 35 wherein the casing coating has a substantially consistent thickness of less than about three inches completely covering the circumferential area of the sleeve along the length of the sleeve.

39. (Original) The method of claim 35 wherein the casing coating is applied to the casing by extrusion, showering, dipping, brush coating, powder coating, or hot melting.

40. (Previously Presented) The method of claim 35 wherein the fibers comprise polypropylene fibers, nylon fibers, or carbon fibers.

41. (Original) The method of claim 35 wherein a casing collar is connected to an end of the casing.

42. (Original) The method of claim 41 wherein the casing collar comprises a hollow cylindrically shaped housing, and a collar coating comprising a stress-absorbing material disposed on the housing.

43. (Currently Amended) An improved casing comprising a sleeve, a stress-absorbing material that is coated on the sleeve to form a casing coating, and a collar connected to an end of the sleeve, the collar comprising the stress-absorbing material, wherein the casing coating substantially covers a circumferential area of the sleeve along a length of the sleeve.

44-46. (Canceled)

47. (Currently Amended) The improved casing of claim 43 wherein the casing coating is directly coated on an interior surface of the sleeve.

48. (Currently Amended) The improved casing of claim 43 wherein the casing coating is completely coated on an exterior surface of the sleeve.

49. (Currently Amended) The improved casing of claim 43 wherein the casing coating has a substantially consistent thickness of less than about three inches completely covering the circumferential area of the sleeve along the length of the sleeve.

50. (Previously Presented) The improved casing of claim 43 wherein the casing coating is applied to the sleeve by extrusion, showering, dipping, brush coating, powder coating, or hot melting.

51. (Original) The improved casing of claim 43 wherein the stress-absorbing material comprises a fiber, a resin, or an elastomer.

52. (Currently Amended) An improved casing comprising:
a sleeve; and
a casing coating comprising a stress-absorbing material that substantially covers a circumferential area of the sleeve along a length of the sleeve, wherein the stress-absorbing material comprises fibers.

53. (Currently Amended) The improved casing of claim 52 wherein the casing coating is directly coated on an interior surface of the sleeve.

54. (Currently Amended) The improved casing of claim 52 wherein the casing coating is directly coated on an exterior surface of the sleeve.

55. (Currently Amended) The improved casing of claim 52 wherein the casing coating has a substantially consistent thickness of less than about three inches completely covering the circumferential area of the sleeve along the length of the sleeve.

56. (Original) The improved casing of claim 52 wherein the casing coating is applied to the sleeve by extrusion, showering, dipping, brush coating, powder coating, or hot melting.

57. (Previously Presented) The improved casing of claim 52 wherein the fibers comprise polypropylene fibers, nylon fibers, or carbon fibers.

58. (Previously Presented) The method of claim 1 further comprising determining a high stress zone of a subterranean formation penetrated by the well bore, and wherein placing the casing into the well bore comprises placing the casing into the high stress zone.

59. (Previously Presented) The method of claim 14 further comprising determining a high stress zone of a subterranean formation penetrated by the well bore, and wherein placing the casing into the well bore comprises placing the casing into the high stress zone.

60. (Previously Presented) The method of claim 22 further comprising determining a high stress zone in the subterranean formation, and wherein placing the casing into the well bore comprises placing the casing into the high stress zone.

61. (Previously Presented) The method of claim 35 further comprising determining a high stress zone in the subterranean formation, and wherein placing the casing into the well bore comprises placing the casing into the high stress zone.

62. (New) The method of claim 1 wherein the sleeve comprises ferrous material, aluminum, or titanium.

63. (New) The method of claim 1 wherein the casing coating completely covers the circumferential area of the sleeve along the length of the sleeve.

64. (New) The method of claim 14 wherein the sleeve comprises ferrous material, aluminum, or titanium.

65. (New) A method of casing a well bore comprising:
placing a casing into the well bore, the casing comprising:
a sleeve, and
a stress absorbing material comprising fibers, wherein the stress absorbing material substantially covers a circumferential area of the sleeve along a length of the sleeve.
66. (New) The method of claim 65 comprising placing a cement composition into an annulus between the casing and a wall of the well bore.
67. (New) The method of claim 65, wherein the stress absorbing material has a substantially consistent thickness of less than about three inches completely covering the circumferential area of the sleeve along the length of the sleeve.
68. (New) The method of claim 65, wherein the fibers comprise polypropylene fibers, nylon fibers, or carbon fibers.
69. (New) The method of claim 65, wherein the sleeve comprises ferrous material, aluminum, or titanium.